

Paragraph beginning at line 17 of page 1 has been amended as follows:

A² As far as a waveform is concerned, the television circuit requires a signal to be maintained with desired dynamic amplitude, even if the power supply is reduced. Therefore, preventative measures may be required with the implementation of a brightness limitation block to avoid the black reference voltage level and the video signals from reaching undesirable levels. Furthermore, the black reference voltage level should be controlled in a constant manner.

Paragraph beginning at line 25 of page 1 has been amended as follows:

A³ In accordance with the present invention, there is provided a video signal processing system that includes, for each colour channel, a control circuit and clamping circuit for generating a colour channel reference signal and controlling a colour channel video signal, and a brightness limitation circuit coupled to receive the colour channel reference signal from each of the colour channels and coupled to provide a feedback signal to regulate a brightness level of each video signal according to a comparison of a minimum signal level amongst the colour channel reference signals and a fixed reference signal level.

Paragraphs beginning at line 27 of page 2 have been amended and combined as follows:

A⁴ The present invention further provides a video signal brightness controller that includes a plurality of colour channel control means each coupled to receive as input a respective colour channel video signal and colour channel reference signal and generate a respective adjusted colour channel video signal and adjusted colour channel reference signal;

Paragraphs beginning at line 1 of page 3 have been combined as follows:

A⁵ a plurality of clamping means, each clamping means corresponding to a respective colour channel control means and being coupled to receive as input the respective adjusted colour channel video signal and adjusted colour channel reference signal and produce a corresponding clamping feedback signal; and a brightness limitation means coupled to receive the adjusted colour channel reference signal from each colour channel control means and produce

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a corresponding brightness feedback signal; wherein each of the colour channel control means includes a first adder in path of the colour channel video signal, to which the clamping feedback signal is coupled, and a second adder in the path of the colour channel reference signal, to which the brightness feedback signal is coupled.

Paragraph beginning at line 20 of page 3 has been amended as follows:

Figures 3 and 4 illustrate video signals from a known system;

Paragraph beginning at line 11 of page 9 has been amended as follows:

A6
Figure 8 shows a simplified block diagram of the circuit 30 shown in Figure 6 (for the red channel only), to further elaborate the detailed operation of the new system. Basically, the control block 4R comprises four adders: three adders are included along the Rblack signal path and one adder is included along the Rsignal path. The brightness block 8 is used to provide brightness adjustment, the CO fine tuning block 10 is used to provide DC adjustment, and the Cut-Off block 12 is used to provide CO adjustment.

Paragraph beginning at line 18 of page 9 has been amended as follows:

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As described above, if the Rblack signal from the control block 4R is less than Vrbck(minimum), a correction signal, Brilim, will be generated and fed back to the brightness block. In the brightness block the correction signal, Brilim, may be combined with a manual brightness adjustment signal, using an adder or the like, to form the ibriR signal provided to the control block. Subsequently, this signal is added to the Rblack signal so as to avoid it from falling into the minimum signal limitation zone.

Paragraph beginning at line 25 of page 9 has been amended as follows:

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Alignment is performed with the use of the clamp block 6R. A comparison is made between the Rblack and Rsignal signals. An iclpR signal is then generated at the output of the clamp block which indicates the amplitude difference of both signals if they are different. Eventually, iclpR signal is added into the Rsignal signal. As such, the Rsignal signal is superimposed on the Rblack signal and alignment has been done.